

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Previously Presented) A communications network arrangement providing voice over IP or voice over ATM services, the network arrangement comprising:
  - a first media gateway controller configured to control a first media gateway, wherein the first media gateway controller is provided with a first operating protocol,
  - a second media gateway controller configured to control a second media gateway, wherein the second media gateway controller is provided with a second, different operating protocol,
  - a computer, and
  - a gateway address translator executable in the computer and incorporating proxies for said first and second media gateways respectively, wherein each of the proxies in said gateway address translator is configured to receive a control message from a respective one of said first and second media gateway controllers, and in response to the control message, forward the control message to a corresponding one of the first and second media gateways, and wherein the gateway address translator is configured to provide a virtual bearer function for messaging between said first and second media gateway controllers.
2. (Previously Presented) The communications network arrangement of claim 1, wherein said gateway address translator comprises virtual gateways, one for each of said first and second media gateway controllers, wherein the virtual gateways are configured to provide the virtual bearer function for messaging between said first and second media gateway controllers.
3. (Previously Presented) The communications network arrangement of claim 2, wherein signaling communication between said first and second media gateway controllers is provided via a signalling network.
4. (Previously Presented) The communications network arrangement of claim 3, wherein said signalling network comprises a Common Channel Signaling 7 network.

5. (Previously Presented) The communications network arrangement of claim 2 wherein said computer comprises a non-transitory machine readable storage medium storing software of said gateway address translator.

6. (Cancelled)

7. (Currently Amended) The communications network arrangement of claim 1, wherein at least one of said first and second media gateway controllers is ~~constituted by~~ implemented in a distributed ~~media gateway controller pair providing separate architecture in which a first~~ processor performs ingress processing and a second processor performs egress ~~functions~~ processing.

8. (Currently Amended) The communications network arrangement of claim 1, wherein at least one of said first and second media gateway controllers is ~~constituted by~~ implemented as a soft switch.

9.-10. (Cancelled)

11. (Currently Amended) The communications network arrangement of claim 1, wherein one of the first and second media gateway controllers is ~~provided as part of~~ included in said computer.

1 12.-15. (Cancelled)

1 16. (Previously Presented) The communications network arrangement of claim 1, wherein  
2 the first media gateway controller is provisioned with an address of a first one of the proxies  
3 instead of an address of the first media gateway, and wherein the second media gateway  
4 controller is provisioned with an address of a second one of the proxies instead of an address of  
5 the second media gateway.

1 17. (Currently Amended) The system of claim [[9]]23, wherein a first one of the ~~gateway~~  
2 proxies is configured to communicate with the first media gateway controller using the first  
3 operating protocol, and a second one of the ~~gateway~~-proxies is configured to communicate with  
4 the second media gateway controller using the second operating protocol, wherein an address of  
5 the first ~~gateway~~-proxy rather than an address of the first media gateway is provisioned at the  
6 first media gateway controller, and an address of the second ~~gateway~~-proxy rather than an  
7 address of the second media gateway is provisioned at the second media gateway controller.

1 18. (Currently Amended) The method of claim [[12]]24, wherein the first media gateway  
2 controller is provisioned with an address of [[a]]~~the first one of the proxies-proxy~~ instead of an  
3 address of the first media gateway, and wherein the second media gateway controller is  
4 provisioned with an address of [[a]]~~the second one of the proxies-proxy~~ instead of an address of  
5 the second media gateway.

1 19. (Currently Amended) The non-transitory machine-readable storage medium of claim  
2 [[15]]26, wherein the first media gateway controller is provisioned with an address of [[a]]~~the~~  
3 ~~first one of the proxies-proxy~~ instead of an address of the first media gateway, and wherein the  
4 second media gateway controller is provisioned with an address of [[a]]~~the second one of the~~  
5 ~~proxies-proxy~~ instead of an address of the second media gateway.

20. (Previously Presented) The communications network arrangement of claim 1, wherein in response to receiving the control message from said first media gateway controller, a first of said proxies is configured to:

substitute, in the control message, an address of said first media gateway controller with an address of the first proxy, and

forward the control message containing the address of the first proxy to the first media gateway.

21. (Cancelled)

22. (Currently Amended) The method of claim [[12]]24, further comprising:

~~receiving, by a first of the proxies, a first control message from the first media gateway controller;~~

the first proxy substituting, in the first control message, an address of the first media gateway controller with an address of the first proxy; and

wherein the first proxy forwarding the first control message comprises sending the first control message containing the address of the first proxy to the first media gateway;

~~receiving, by a second of the proxies, a second control message from the second media gateway controller;~~

the second proxy substituting, in the second control message, an address of the second media gateway controller with an address of the second proxy; and

wherein the second proxy forwarding the second control message comprises sending the second control message containing the address of the second proxy to the second gateway.

23. (New) A system comprising:

a first media gateway controller configured to control a first media gateway, wherein the first media gateway controller is provided with a first operating protocol;

a second media gateway controller configured to control a second media gateway, wherein the second media gateway controller is provided with a second, different operating protocol;

a computer configured to:

perform address translation and provide proxies for said first media gateway and said second media gateway, wherein the address translation substitutes, in a message, an address of one of the proxies in place of an address of a corresponding one of the first and second media gateway controllers;

provide virtual gateways for respective ones of said first and second media gateway controllers, wherein said virtual gateways perform virtual bearer messaging between said first media gateway controller and said second media gateway controller;

relay messages between said first media gateway controller and said first media gateway; and

relay messages between said second media gateway controller and said second media gateway.

24. (New) A method comprising:

receiving, by a computer, a first control message from a first media gateway controller configured to control a first media gateway, wherein the first control message is according to a first operating protocol;

in response to the first control message, a first proxy in the computer forwarding the first control message to the first media gateway;

receiving, by the computer, a second control message from a second media gateway controller configured to control a second media gateway, wherein the second control message is according to a second operating protocol;

in response to the second control message, a second proxy in the computer forwarding the second control message to the second media gateway; and

relaying, by the computer, a third message between the first and second media gateway controllers to provide virtual bearer messaging between the first and second media gateway controllers.

25. (New) A communication network arrangement comprising:

a plurality of media gateways;

a plurality of media gateway controllers, wherein each media gateway controller is configured to control a corresponding one of the media gateways, wherein said media gateway controllers are to employ different operating protocols to communicate with the corresponding media gateways, wherein each of said media gateway controllers and the corresponding one of the media gateways form a respective pair that communicate using a corresponding one of the operating protocols; and

a computer configured to perform gateway address translation between each paired media gateway and media gateway controller, wherein said computer is configured to further perform virtual bearer messaging between said plurality of media gateway controllers.

1    26.    (New) A non-transitory machine-readable storage medium storing instructions that when  
2    executed cause a computer to perform:  
3            receiving a first control message from a first media gateway controller configured to  
4    control a first media gateway, wherein the first control message is according to a first operating  
5    protocol;  
6            in response to the first control message, a first proxy in the computer forwarding the first  
7    control message to the first media gateway;  
8            receiving a second control message from a second media gateway controller configured  
9    to control a second media gateway, wherein the second control message is according to a second  
10   operating protocol;  
11           in response to the second control message, a second proxy in the computer forwarding  
12   the second control message to the second media gateway; and  
13           relaying a third message between the first and second media gateway controllers to  
14   provide virtual bearer messaging between the first and second media gateway controllers.